PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY BEC'D 0 4 AUG 2004 To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International filing date (day/month/year) Priority date (day/month/year) International application No. PCT/CA2004/000606 22.04.2004 22 04 2003 International Patent Classification (IPC) or both national classification and IPC A01N43/16, A01N63/02 Applicant BIOS AGRICULTURE INC. 1. This opinion contains indications relating to the following items: Box No. i Basis of the opinion Box No. II ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. iV Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the international Preliminary Examining Authority (PIPEA'). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the international Bureau under Rule 66.1bis(b) that written opinions of this international Searching Authority will not be so considered.

if this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

For further details, see notes to Form PCT/ISA/220.

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/000606

Box No. I Basis of the opinion
 With regard to the language, this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this Item.
☐ This opinion has been established on the basis of a translation from the original language into the following language which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
a. type of material:
□ a sequence listing
□ table(s) related to the sequence listing
b. format of material:
☐ In written format
☐ in computer readable form
c. time of filing/furnishing:
☐ contained in the international application as filled.
filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. \(\subseteq \) In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/000606

Box No. II Priority

- 1. M The following document has not been furnished:
 - □ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
 - translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

- This opinion has been established as if no priority had been claimed due to the fact that the priority claim
 has been found invalid (Rulles 43b/s. 1 and 64.1). Thus for the purposes of this opinion, the international
 filing date indicated above is considered to be the relevant date.
- 3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(l) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: No:	Claims Claims	1 - 5
Inventive step (IS)	Yes: No:	Claims Claims	1-5
1	NO:	Ciaims	1-5
industrial applicability (IA)	Yes:		1 - 5
	No:	Claime	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the International application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CA2004/000606

-	- 80	ox No. I Basis of the report			
	. W	ith regard to the la <mark>nguage,</mark> this report is based on the international application in the language in which it was d, unless otherwise indicated under this item.			
		This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of: international search (under Rules 12.3 and 23.1(b)) publication of the international application (under Rule 12.4) international preliminary examination (under Rules 55.2 and/or 55.3)			
2	na	th regard to the elements* of the International application, this report is based on <i>(replacement sheets which</i> ve been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this port as *originally filed* and are not annexed to this report):			
	Description, Pages				
	6-2	5 as originally filed			
	1-5	, 5a received on 03.03.2005 with letter of 22.02.2005			
	Cla	ims, Numbers			
1-6 received on 03.03.2005 with letter of 22.02.2005		received on 03.03.2005 with letter of 22,02,2005			
	Drawings, Sheets				
	1-15 as originally filed				
		a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing			
3.		The amendments have resulted in the cancellation of: the description, pages the claims, Nos. the drawings, sheets/figs the sequence listing (specify): any table(s) related to sequence listing (specify):			
4.	Sup	This report has been established as if (some of) the amendments annexed to this report and listed below not been made, since they have been considered to go beyond the disclosure as filled, as indicated in the plemental Box (Fule 70.2(c)). the description, pages the claims, Nos. the drawings, sheetsfigs the claims, Nos. the drawings, sheetsfigs the sequence listing (specify): any table(s) related to sequence listing (specify): If item 4 applies, some or all of these sheets may be marked "superseded."			

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/CA2004/000606

 Prithiviraj et al., 2003 (= D1) discloses an accelerated flowering and an increased number of flowers on application of LCO's to plants (D1: page 440, last paragraph).
 Atti et al., 2002 (= D2) discloses an increase in flower induction and pod development on treatment of soy bean with LCO's.

WO 01/26465 A1 $\stackrel{.}{(=)}$ D3) also discloses that treatment of soy bean with LCO's results in increased flower clusters and pod numbers per plant (see in particular example 5 and table 3).

The use of LCO's for acceleration flowering and fruiting of plants or for increasing flower numbers and associated yield hence are known from the prior art.

Claims 1 - 5 hence are not novel (Art. 33 (2) PCT).

Insofar as the claims relate to other plants, it appears that the enhanced flowering and fruiting in such plants are obvious in view of the teachings of D1 - D3 since it is well-known in the art that the plant growth regulating (promoting) effects of LCO's are not plant specific.

Various parts of the description mention that also compositions comprising LCO's are part of the invention thus rendering the intended scope of protection ambiguous contrary to the requirements of Art. 6 PCT.

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.